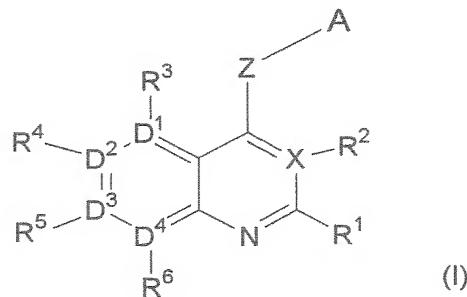


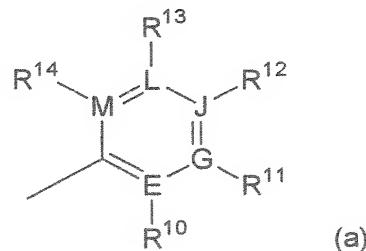
CLAIMS

1. A compound of formula (I) or a pharmaceutically acceptable salt or solvate thereof:



wherein

A represents a group of formula (a):



Z represents $-O-$, $-N(-R^Z)-$, $-S-$, or $-C(=O)-$ wherein R^Z represents a hydrogen atom or unsubstituted C1-4 alkyl,

D^1 , D^2 , D^3 , D^4 , X , E , G , J , L , and M , which may be the same or different, represent C or N,

R^1 to R^6 and R^{10} to R^{14} , which may be the same or different, represent

- (1) a hydrogen atom;
- (2) a halogen atom;
- (3) hydroxyl;
- (4) cyano group;
- (5) nitro group;
- (6) C1-6 alkyl;
- (7) C2-6 alkenyl;
- (8) C2-6 alkynyl;

(9) C1-6 alkoxy;

(10) C1-6 alkylthio;

wherein (6) C1-6 alkyl, (7) C2-6 alkenyl, (8) C2-6 alkynyl, (9) C1-6 alkoxy, and (10) C1-6 alkylthio are optionally substituted by

(I) hydroxyl,

(II) a halogen atom,

(III) C1-4 alkoxy,

(IV) an oxygen atom,

(V) a saturated or unsaturated three- to nine-membered carbocyclic or heterocyclic group wherein the carbocyclic or heterocyclic group is optionally substituted by C1-4 alkyl, C1-4 alkoxy, a halogen atom, or a five- or six-membered carbocyclic or heterocyclic group, and the C1-4 alkyl group is optionally substituted by hydroxyl or phenyl,

(VI) amino group wherein one or two hydrogen atoms in the amino group are optionally substituted by C1-4 alkyl or a five- or six-membered carbocyclic or heterocyclic group, and the C1-4 alkyl group is optionally substituted by hydroxyl or C1-4 alkoxy,

(VII) -NHCONHR^{VII} wherein R^{VII} represents C1-4 alkyl,

(VIII) -OCOR^{VIII} wherein R^{VIII} represents C1-6 alkyl optionally substituted by amino, or

(IX) -NSO₂R^{IX} wherein R^{IX} represents C1-4 alkyl;

(11) -NR^aR^b;

(12) -CO-OR^c;

(13) -CO-NR^dR^e;

wherein, in groups (11) to (13), R^a, R^b, R^c, R^d, and R^e, which may be the same or different, represent a hydrogen atom or C1-4 alkyl, and the C1-4 alkyl group is optionally substituted by

(a) hydroxyl,

(b) a halogen atom,

(c) C1-4 alkoxy,

(d) a saturated or unsaturated three- to nine-membered carbocyclic or heterocyclic group optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom, or

(e) amino group wherein one or two hydrogen atoms in the amino group are optionally substituted by C1-4 alkyl, and

R^d and R^e together may combine with the carbon atoms to which they are attached represent a saturated three- to nine-membered heterocyclic group, and the heterocyclic group is optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom or may contain one or more additional heteroatoms;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group;

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group;

(17) -OCOR^k wherein R^k represents C1-4 alkyl; or

(18) -OSO₂R^L wherein R^L represents C1-4 alkyl,

wherein (14) carbocyclic group, (15) heterocyclic group, and (16) bicyclic carbocyclic or heterocyclic group are optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino group are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl, and

R¹⁰ and R¹¹, R¹¹ and R¹², R¹² and R¹³, and R¹³ and R¹⁴ together may combine with the carbon atoms to which they are attached represent a saturated or unsaturated

five- or six-membered carbocyclic or heterocyclic group, and the carbocyclic or heterocyclic group is optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl,

provided that, when D¹, D², D³, D⁴, X, E, G, J, L, and M represent a nitrogen atom, groups R² to R⁶ and R¹⁰ to R¹⁴ which attach to the nitrogen atom are absent, and

provided that, when all of D¹, D², D³, and D⁴ represent a carbon atom,

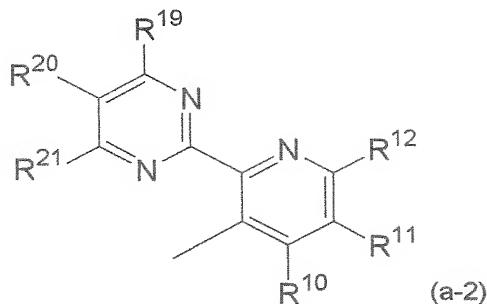
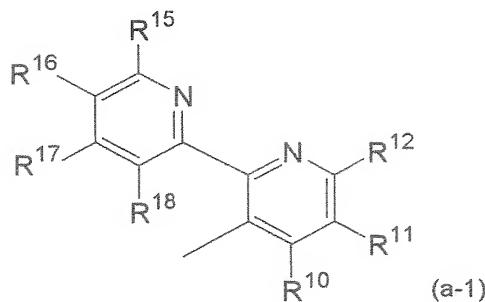
I) at least one of R⁴ and R⁵ represents (4) cyano group, (5) nitro group, (12) -CO-OR^c, (13) -CO-NR^dR^e wherein any one of R^d and R^e represents optionally substituted C1-4 alkyl, (14) carbocyclic group, (15) heterocyclic group wherein the heterocyclic group contains at least one substituent, or (16) bicyclic carbocyclic group or heterocyclic group, or

II) L represents a nitrogen atom, E, G, J, and M represent a carbon atom, R¹⁰ represents a hydrogen atom, and R¹⁴ represents (6) C1-6 alkyl group, (14) carbocyclic group, (15) heterocyclic group, or (16) bicyclic carbocyclic group or heterocyclic group.

2. The compound according to claim 1, wherein at least one of D¹ to D⁴ represents a nitrogen atom.
3. The compound according to claim 1, wherein D¹ represents a nitrogen atom and, at the same time, all of D² to D⁴ represent a carbon atom.
4. The compound according to claim 1, wherein D²

represents a nitrogen atom and, at the same time, all of D¹, D³, and D⁴ represent a carbon atom.

5. The compound according to any one of claims 2 to 4, wherein, in the group of formula (a), any one of E, G, J, L, and M represents a nitrogen atom and all the others represent a carbon atom.
6. The compound according to any one of claims 2 to 4, wherein L represents a nitrogen atom and E, G, J, and M represent a carbon atom.
7. The compound according to any one of claims 2 to 6, wherein
 - R¹⁰ represents a hydrogen atom, and
 - R¹¹ and R¹² are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.
8. The compound according to any one of claims 2 to 7, wherein R¹⁴ represents an optionally substituted saturated or unsaturated five- or six-membered carbocyclic or heterocyclic group.
9. The compound according to claim 8, wherein R¹⁴ represents an optionally substituted unsaturated six-membered heterocyclic group.
10. The compound according to any one of claims 2 to 9, wherein A represents a group of formula (a-1) or (a-2):



wherein

R^{10} to R^{12} are as defined in claim 1, and

R¹⁵ to R¹⁸ and R¹⁹ to R²¹, which may be the same or different, represent (0) a hydrogen atom, (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl.

11. The compound according to claim 10, wherein, in the group of formula (a-1) or (a-2), R^{15} to R^{18} and R^{19} to R^{21} are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.
12. The compound according to claim 10 or 11, wherein R^{10} represents a hydrogen atom, R^{11} and R^{12} are selected from the group consisting of a hydrogen atom and C1-4 alkyl, and R^{15} to R^{18} and R^{19} to R^{21} in the group of formula (a-1) or (a-2) are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.
13. The compound according to claim 10 or 11, wherein R^{10} represents a hydrogen atom, R^{11} and R^{12} are selected from the group consisting of

a hydrogen atom and C1-4 alkyl, and
 all of R¹⁵ to R¹⁸ and R¹⁹ to R²¹ in the group of formula
 (a-1) or (a-2) represent a hydrogen atom.

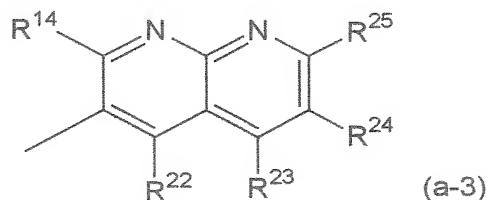
14. The compound according to claim 12 or 13, wherein
 Z represents -O-, X represents a carbon atom, and R¹ to R³
 and R⁶ represent a hydrogen atom.

15. The compound according to any one of claims 2 to 6,
 wherein

R¹⁰ represents a hydrogen atom, and
 R¹¹ and R¹² together combine with the carbon atoms
 to which they are attached represent a saturated or
 unsaturated five- or six-membered carbocyclic or
 heterocyclic group.

16. The compound according to claim 15, wherein R¹¹
 and R¹² together combine with the carbon atoms to which
 they are attached represent a unsaturated six-membered
 carbocyclic or heterocyclic group.

17. The compound according to any one of claims 2 to 4,
 wherein A represents a group of formula (a-3):



wherein

R¹⁴ is as defined in claim 1, and
 R²² to R²⁵, which may be the same or different,
 represent (0) a hydrogen atom, (i) hydroxyl, (ii) a halogen
 atom, (iii) cyano group, (iv) nitro group, (v) amino group
 wherein one or two hydrogen atoms in the amino groups
 are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl,

(vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl).

18. The compound according to claim 17, wherein R²² to R²⁵ in the group of formula (a-3) are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.
19. The compound according to claim 17, wherein all of R²² to R²⁵ in the group of formula (a-3) represent a hydrogen atom.
20. The compound according to any one of claims 17 to 19, wherein R¹⁴ represents
 - optionally substituted C1-4 alkyl,
 - an optionally substituted saturated or unsaturated five- or six-membered carbocyclic or heterocyclic group, or
 - an optionally substituted bicyclic saturated or unsaturated nine- or ten-membered carbocyclic or heterocyclic group.
21. The compound according to claim 20, wherein R¹⁴ represents unsubstituted C1-4 alkyl.
22. The compound according to claim 20, wherein R¹⁴ represents an optionally substituted unsaturated six-membered carbocyclic or heterocyclic group.
23. The compound according to any one of claims 2 to 22, wherein X represents a carbon atom and both R¹ and R² represent a hydrogen atom.
24. The compound according to claim 23, wherein

D^1 represents a nitrogen atom and all of D^2 to D^4 represent a carbon atom, and
 R^6 represents a hydrogen atom.

25. The compound according to claim 23, wherein
 D^2 represents a nitrogen atom and all of D^1 , D^3 , and D^4 represent a carbon atom, and
 R^3 represents a hydrogen atom or a halogen atom, and R^6 represents a hydrogen atom.

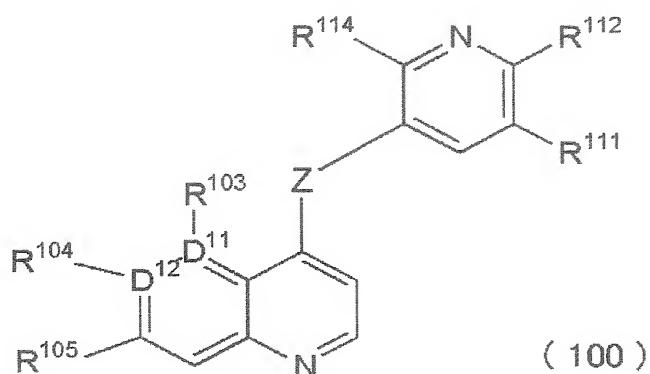
26. The compound according to claim 23, wherein all of R^1 , R^2 , R^3 and R^6 represent a hydrogen atom.

27. The compound according to any one of claims 2 to 26, wherein R^4 and R^5 , which may be the same or different, represent
(1) a hydrogen atom;
(2) a halogen atom;
(3) hydroxyl;
(6) C1-6 alkyl;
(9) C1-6 alkoxy;
(12) -CO-OR^c;
(13) -CO-NR^dR^e;
(14) a saturated or unsaturated three- to nine-membered carbocyclic group;
(15) a saturated or unsaturated three- to nine-membered heterocyclic group;
(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group;
(17) -OCOR^k wherein R^k represents C1-4 alkyl; or
(18) -OSO₂R^l wherein R^l represents C1-4 alkyl, wherein these groups are optionally substituted as defined in claim 1.

28. The compound according to any one of claims 1 to 27, wherein Z represents -O-.

29. The compound according to any one of claims 1 to 28, wherein X represents a carbon atom.

30. The compound according to claim 1 or a pharmaceutically acceptable salt or solvate thereof, wherein formula (I) is represented by formula (100):



wherein

Z represents -O-, -NH-, -S-, or -C(=O)-,
any one of D¹¹ and D¹² represents a nitrogen atom,
and the other represents a carbon atom,

R¹⁰³ represents a hydrogen atom or a halogen atom,
R¹⁰⁴ and R¹⁰⁵, which may be the same or different,
represent

- (1) a hydrogen atom ;
- (2) a halogen atom;
- (3) hydroxyl;
- (6) C1-6 alkyl;
- (9) C1-6 alkoxy;
- (12) -CO-OR^c;
- (13) -CO-NR^dR^e;
- (14) a saturated or unsaturated three- to nine-membered carbocyclic group;
- (15) a saturated or unsaturated three- to nine-membered heterocyclic group; or
- (16) a bicyclic saturated or unsaturated eight- to

twelve-membered carbocyclic or heterocyclic group,
wherein these groups are optionally substituted as
defined in claim 1,

R^{111} and R^{112} , which may be the same or different,
are selected from the group consisting of a hydrogen atom,
C1-4 alkyl, and C1-4 alkoxy, and

R^{114} represents

(14'') a saturated or unsaturated five- or
six-membered carbocyclic group;

(15'') a saturated or unsaturated five- or
six-membered heterocyclic group; or

(16'') a bicyclic saturated or unsaturated nine- or
ten-membered carbocyclic or heterocyclic group;

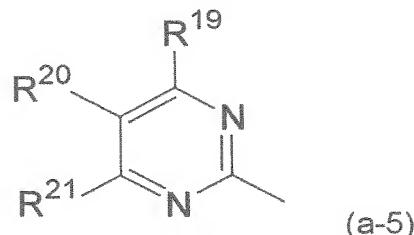
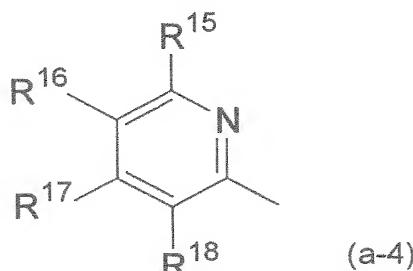
wherein (14'') carbocyclic group, (15'') heterocyclic group, and (16'') bicyclic carbocyclic group or
heterocyclic group are optionally substituted by (i)
hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro
group, (v) amino group wherein one or two hydrogen
atoms in the amino groups are optionally substituted by
C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4
alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f,
or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be
the same or different, represent a hydrogen atom or C1-4
alkyl.

31. The compound according to claim 30, wherein Z
represents -O-.

32. The compound according to claim 30 or 31, wherein
 R^{103} represents a hydrogen atom.

33. The compound according to any one of claims 30 to
32, wherein
both R^{111} and R^{112} represent methyl, or
 R^{111} represents a hydrogen atom, and R^{112}
represents ethyl.

34. The compound according to any one of claims 30 to 33, wherein R^{114} represents a group of formula (a-4) or (a-5):



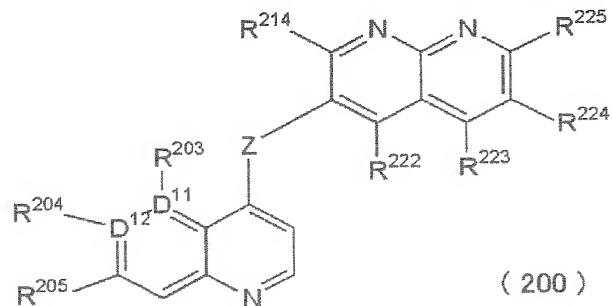
wherein

R^{15} to R^{18} and R^{19} to R^{21} , which may be the same or different, are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.

35. The compound according to claim 34, wherein all of R^{15} to R^{18} and R^{19} to R^{21} represent a hydrogen atom.

36. The compound according to any one of claims 30 to 35, wherein both R^{104} and R^{105} represent a hydrogen atom.

37. The compound according to claim 1 or a pharmaceutically acceptable salt or solvate thereof, wherein formula (I) is represented by formula (200):



wherein

Z represents -O-, -NH-, -S-, or -C(=O)-,

any one of D¹¹ and D¹² represents a nitrogen atom, and the other represents a carbon atom,

R²⁰³ represents a hydrogen atom or a halogen atom,

R²⁰⁴ and R²⁰⁵, which may be the same or different, represent

(1) a hydrogen atom ;

(2) a halogen atom;

(3) hydroxyl;

(6) C1-6 alkyl;

(9) C1-6 alkoxy;

(12) -CO-OR^c;

(13) -CO-NR^dR^e;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group; or

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group, wherein these groups are optionally substituted as defined in claim 1),

R²²² to R²²⁵, which may be the same or different, are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy, and

R²¹⁴ represents

unsubstituted C1-4 alkyl,

an optionally substituted unsaturated six-membered carbocyclic or heterocyclic group, or

an optionally substituted, bicyclic saturated or unsaturated nine- or ten-membered carbocyclic or heterocyclic group.

38. The compound according to claim 37, wherein Z represents -O-.

39. The compound according to claim 37 or 38, wherein R²⁰³ represents a hydrogen atom.

40. The compound according to any one of claims 37 to 39, wherein all of R²²² to R²²⁵ represent a hydrogen atom.

41. The compound according to any one of claims 37 to 40, wherein R²¹⁴ represents phenyl.

42. The compound according to any one of claims 37 to 40, wherein R²¹⁴ represents methyl or ethyl.

43. The compound according to any one of claims 37 to 42, wherein both R²⁰⁴ and R²⁰⁵ represent a hydrogen atom.

44. The compound according to claim 1, wherein all of D¹ to D⁴ represent a carbon atom, R¹ and R² represent a hydrogen atom, and R³ and R⁶, which may be the same or different, represent a hydrogen atom, a halogen atom, or C1-4 alkyl, and R⁴ and R⁵, which may be the same or different, represent

- (4) cyano group;
- (5) nitro group;
- (12) -CO-OR^c;
- (13) -CO-NR^dR^e;

wherein, in groups (12) and (13), R^c, R^d, and R^e, which may be the same or different, represent a hydrogen atom or C1-4 alkyl, provided that at least one of R^d and R^e represents C1-4 alkyl, and the C1-4 alkyl group is optionally substituted by

- (a) hydroxyl,
- (b) a halogen atom,
- (c) C1-4 alkoxy,
- (d) a saturated or unsaturated three- to nine-membered carbocyclic or heterocyclic group optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom,

or

(e) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl,

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group; or

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group,

wherein (14) carbocyclic group, (15) heterocyclic group, and (16) bicyclic carbocyclic group or heterocyclic group are optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl, and (15) heterocyclic group contain at least one substituent.

45. The compound according to claim 44, wherein R⁴ and R⁵ represent an unsaturated five- or six-membered carbocyclic or heterocyclic group wherein the carbocyclic or heterocyclic group is optionally substituted by C1-4 alkyl, C1-4 alkoxy, a halogen atom, amino group, or hydroxyl, or a bicyclic unsaturated nine- or ten-membered carbocyclic or heterocyclic group wherein the carbocyclic or heterocyclic group is optionally substituted by C1-4 alkyl, C1-4 alkoxy, a halogen atom, amino group, or hydroxyl.

46. The compound according to claim 44 or 45, wherein L represents a nitrogen atom, and E, G, J, and M represent

a carbon atom.

47. The compound according to any one of claims 44 to 46, wherein R^{14} represents

(6) C1-6 alkyl; wherein the alkyl group is optionally substituted as defined in claim 1,

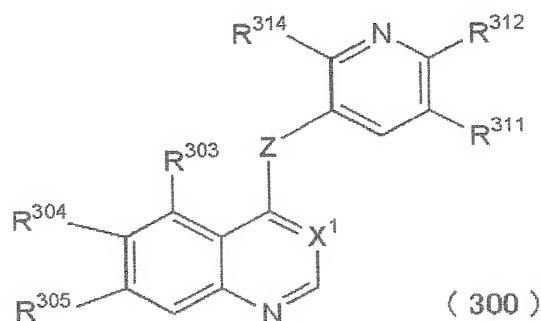
(14'') a saturated or unsaturated five- or six-membered carbocyclic group;

(15'') a saturated or unsaturated five- or six-membered heterocyclic group; or

(16'') a bicyclic saturated or unsaturated nine- or ten-membered carbocyclic or heterocyclic group;

wherein (14'') carbocyclic group, (15'') heterocyclic group, and (16'') bicyclic carbocyclic group or heterocyclic group are optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl.

48. The compound according to claim 1 or a pharmaceutically acceptable salt or solvate thereof, wherein formula (I) is represented by formula (300):



wherein

X^1 represents CH or N,

Z represents -O-, -NH-, -S-, or -C(=O)-,

R^{303} represents a hydrogen atom, a halogen atom, or C1-4 alkyl,

R^{304} and R^{305} , which may be the same or different, represent

(1) a hydrogen atom;

(2) a halogen atom;

(3) hydroxyl;

(6) C1-6 alkyl;

(9) C1-6 alkoxy;

(12) -CO-OR^c;

(13) -CO-NR^dR^e;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group;

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group;

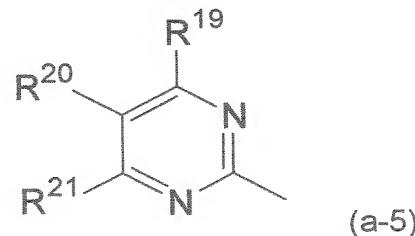
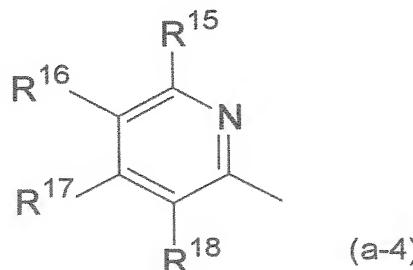
(17) -OCOR^k wherein R^k represents C1-4 alkyl; or

(18) -OSO₂R^l wherein R^l represents C1-4 alkyl, wherein these groups are optionally substituted as defined in claim 1,

at least one of R^{311} and R^{312} represents C1-4 alkyl and the other represents a hydrogen atom or C1-4 alkyl, and

R^{314} represents an unsaturated six-membered heterocyclic group wherein the heterocyclic group is optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl.

49. The compound according to claim 48, wherein
 Z represents $-O-$,
 R^{303} represents a hydrogen atom, and
 R^{304} represents
(1) a hydrogen atom ;
(2) a halogen atom;
(3) hydroxyl;
(9) C1-6 alkoxy;
(17) $-OCOR^k$ wherein R^k represents C1-4 alkyl; or
(18) $-OSO_2R^L$ wherein R^L represents C1-4 alkyl,
wherein these groups are optionally substituted as defined
in claim 1,
 R^{305} represents a hydrogen atom, a halogen atom, or
 $-CO-NH_2$, and
 R^{314} represents a group of formula (a-4) or (a-5):



wherein

R^{15} to R^{18} and R^{19} to R^{21} , which may be the same or different, are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.

50. The compound according to claim 49, wherein R^{15} to R^{18} and R^{19} to R^{21} represent a hydrogen atom.

51. The compound according to any one of claims 48 to 50, wherein X^1 represents CH.

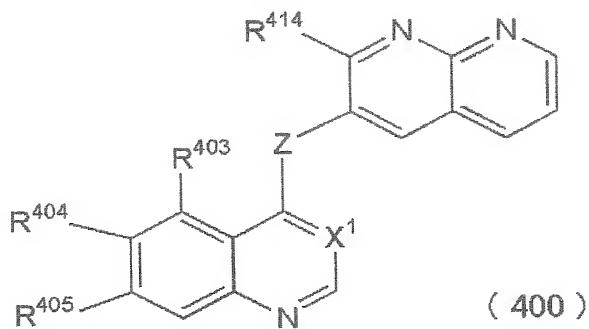
52. The compound according to any one of claims 48 to

51, wherein R^{305} represents a hydrogen atom, a fluorine atom, or $-CO-NH_2$.

53. The compound according to any one of claims 48 to 52, wherein R^{311} and R^{312} , which may be the same or different, represent C1-4 alkyl.
54. The compound according to claim 53, wherein both R^{311} and R^{312} represent methyl.
55. The compound according to any one of claims 48 to 52, wherein
 - R^{311} represents a hydrogen atom, and
 - R^{312} represents C1-4 alkyl.
56. The compound according to claim 55, wherein
 - R^{311} represents a hydrogen atom, and
 - R^{312} represents methyl.
57. The compound according to claim 55, wherein
 - R^{311} represents a hydrogen atom, and
 - R^{312} represents ethyl.
58. The compound according to any one of claims 48 to 57, wherein R^{304} represents C1-6 alkoxy optionally substituted as defined in claim 1.
59. The compound according to claim 58, wherein R^{304} represents C1-6 alkoxy substituted by hydroxyl.
60. The compound according to claim 58, wherein R^{304} represents $-O(CH_2)m_1-OH$ wherein m_1 is an integer of 2 to 4.
61. The compound according to claim 58, wherein R^{304} represents $-OC_2H_5-OH$.

62. The compound according to claim 48, which is selected from the group consisting of compounds 181, 188, 192, 200, 202, and 205.

63. The compound according to claim 1 or a pharmaceutically acceptable salt or solvate thereof, wherein formula (I) is represented by formula (400):



wherein

X^1 represents CH or N,

Z represents -O-, -NH-, -S-, or -C(=O)-,

R^{403} represents a hydrogen atom, a halogen atom, or C1-4 alkyl,

R^{404} and R^{405} , which may be the same or different, represent

(1) a hydrogen atom ;

(2) a halogen atom;

(3) hydroxyl;

(6) C1-6 alkyl;

(9) C1-6 alkoxy;

(12) -CO-OR^c;

(13) -CO-NR^dR^e;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group;

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group;

(17) -OCOR^k wherein R^k represents C1-4 alkyl; or

(18) -OSO₂R^l wherein R^l represents C1-4 alkyl,

wherein these groups are optionally substituted as defined in claim 1, and

R⁴¹⁴ represents

(6) C1-6 alkyl;

wherein the alkyl group is optionally substituted as defined in claim 1,

(14'') a saturated or unsaturated five- or six-membered carbocyclic group;

(15'') a saturated or unsaturated five- or six-membered heterocyclic group; or

(16'') a bicyclic saturated or unsaturated nine- or ten-membered carbocyclic or heterocyclic group;

wherein (14'') carbocyclic group, (15'') heterocyclic group, and (16'') bicyclic carbocyclic group or heterocyclic group are optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl.

64. The compound according to claim 63, wherein

Z represents -O-,

R⁴⁰³ represents a hydrogen atom, and

R⁴¹⁴ represents

an unsaturated five- or six-membered carbocyclic or heterocyclic group wherein the carbocyclic or heterocyclic group is optionally substituted by C1-4 alkyl, C1-4 alkoxy, a halogen atom, amino group, or hydroxyl, or

a bicyclic unsaturated nine- or ten-membered carbocyclic or heterocyclic group wherein the carbocyclic or

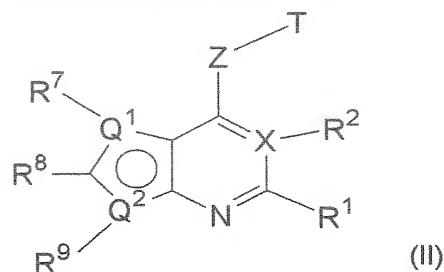
heterocyclic group is optionally substituted by C1-4 alkyl, C1-4 alkoxy, a halogen atom, amino group, or hydroxyl.

65. The compound according to claim 63, wherein
 X¹ represents CH,
 Z represents -O-,
 R⁴⁰³ represents a hydrogen atom,
 any one of R⁴⁰⁴ and R⁴⁰⁵ represents C1-4 alkoxy substituted by hydroxyl, and the other represents unsubstituted C1-4 alkoxy, and
 R⁴¹⁴ represents phenyl.

66. The compound according to claim 63, which is compound 178.

67. The compound according to claim 1, which is selected from the group consisting of compounds 1 to 27, 30, 31, 37 to 70, 73, 74, 81 to 179, and 181 to 225.

68. A compound of formula (II) or a pharmaceutically acceptable salt or solvate thereof:



wherein

T represents a saturated or unsaturated five- or six-membered carbocyclic or heterocyclic group,

wherein group T is optionally substituted by groups (2) to (16):

- (2) a halogen atom;
- (3) hydroxyl;
- (4) cyano group;
- (5) nitro group;

- (6) C1-6 alkyl;
- (7) C2-6 alkenyl;
- (8) C2-6 alkynyl;
- (9) C1-6 alkoxy;
- (10) C1-6 alkylthio;

wherein (6) C1-6 alkyl, (7) C2-6 alkenyl, (8) C2-6 alkynyl, (9) C1-6 alkoxy, and (10) C1-6 alkylthio are optionally substituted by

- (I) hydroxyl,
- (II) a halogen atom,
- (III) C1-4 alkoxy,
- (IV) an oxygen atom,

(V) a saturated or unsaturated three- to nine-membered carbocyclic or heterocyclic group optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom, or

(VI) amino group wherein one or two hydrogen atoms in the amino group are optionally substituted by C1-4 alkyl, and the C1-4 alkyl group is optionally substituted by hydroxyl or C1-4 alkoxy,

- (11) -NR^aR^b;
- (12) -CO-OR^c;
- (13) -CO-NR^dR^e;

wherein, in groups (11) to (13), R^a, R^b, R^c, R^d, and R^e, which may be the same or different, represent a hydrogen atom or C1-4 alkyl, and the C1-4 alkyl group is optionally substituted by

- (a) hydroxyl,
- (b) a halogen atom,
- (c) C1-4 alkoxy,
- (d) a saturated or unsaturated three- to nine-membered carbocyclic or heterocyclic group optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom, or

- (e) amino group wherein one or two hydrogen atoms in the amino groups are optionally

substituted by C1-4 alkyl, and

R^d and R^e together may combine with the carbon atoms to which they are attached represent a saturated three- to nine-membered heterocyclic group wherein the heterocyclic group is optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom and may further contain one or more additional heteroatoms;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group; or

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group,

wherein (14) carbocyclic group, (15) heterocyclic group, and (16) bicyclic carbocyclic group or heterocyclic group are optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl,

two adjacent substituents on group T together may combine with the carbon atoms to which they are attached represent a saturated or unsaturated five- or six-membered carbocyclic or heterocyclic group, and the carbocyclic or heterocyclic group is optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4

alkyl,

Q^1 and Q^2 , which may be the same or different, represent C, S, O, or N,

X represents C or N,

Z represents $-O-$, $-N(-R^Z)-$, $-S-$, or $-C(=O)-$ wherein R^Z represents a hydrogen atom or unsubstituted C1-4 alkyl,

R^1 , R^2 , and R^7 to R^9 , which may be the same or different, represent,

- (1) a hydrogen atom;
- (2) a halogen atom;
- (3) hydroxyl;
- (4) cyano group;
- (5) nitro group;
- (6) C1-6 alkyl;
- (7) C2-6 alkenyl;
- (8) C2-6 alkynyl;
- (9) C1-6 alkoxy;
- (10) C1-6 alkylthio;

wherein (6) C1-6 alkyl, (7) C2-6 alkenyl, (8) C2-6 alkynyl, (9) C1-6 alkoxy, and (10) C1-6 alkylthio are optionally substituted by

- (I) hydroxyl,
- (II) a halogen atom,
- (III) C1-4 alkoxy,
- (IV) an oxygen atom,

(V) a saturated or unsaturated three- to nine-membered carbocyclic or heterocyclic group optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom, or

(VI) amino group wherein one or two hydrogen atoms in the amino group are optionally substituted by C1-4 alkyl, and the C1-4 alkyl group is optionally substituted by hydroxyl or C1-4 alkoxy;

- (11) $-NR^aR^b$;
- (12) $-CO-OR^c$;

(13) $-\text{CO-NR}^d\text{R}^e$;

wherein, in groups (11) to (13), R^a , R^b , R^c , R^d , and R^e , which may be the same or different, represent a hydrogen atom or C1-4 alkyl, and C1-4 alkyl is optionally substituted by

- (a) hydroxyl,
- (b) a halogen atom,
- (c) C1-4 alkoxy,

(d) a saturated or unsaturated three- to nine-membered carbocyclic or heterocyclic group optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom, or

(e) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, and

R^d and R^e together may combine with the carbon atoms to which they are attached represent a saturated three- to nine-membered heterocyclic group, and the heterocyclic group is optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom and may contain one or more additional heteroatoms;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group; or

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group,

wherein (14) carbocyclic group, (15) heterocyclic group, and (16) bicyclic carbocyclic or heterocyclic group are optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) $-\text{CO-OR}^f$, or (xii) $-\text{CO-NR}^g\text{R}^h$ wherein R^f , R^g , and R^h , which may be

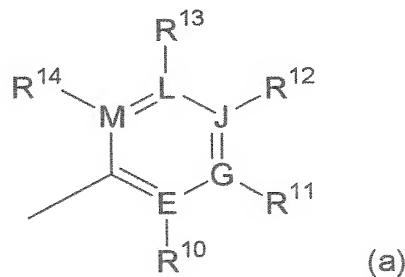
the same or different, represent a hydrogen atom or C1-4 alkyl, and

the five-membered ring part containing Q¹ and Q² in formula (II) represents an aromatic ring,

provided that, when X represents a nitrogen atom, R² is absent, and

when Q¹ and Q² represent an oxygen atom or a sulfur atom, R⁷ and R⁹ which attach to the oxygen atom or the sulfur atom are absent, and, when both Q¹ and Q² represent a nitrogen atom, any one of R⁷ and R⁹ is absent.

69. The compound according to claim 68, wherein T represents a group of formula (a):



wherein

E, G, J, L, and M, which may be the same or different, represent C or N, and

R¹⁰ to R¹⁴, which may be the same or different, represent

- (1) a hydrogen atom;
- (2) a halogen atom;
- (3) hydroxyl;
- (4) cyano group;
- (5) nitro group;
- (6) C1-6 alkyl;
- (7) C2-6 alkenyl;
- (8) C2-6 alkynyl;
- (9) C1-6 alkoxy;
- (10) C1-6 alkylthio;

wherein (6) C1-6 alkyl, (7) C2-6 alkenyl, (8)

C2-6 alkynyl, (9) C1-6 alkoxy, and (10) C1-6 alkylthio are optionally substituted by

- (I) hydroxyl,
- (II) a halogen atom,
- (III) C1-4 alkoxy,
- (IV) an oxygen atom,

(V) a saturated or unsaturated three- to nine-membered carbocyclic or heterocyclic group optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom, or

(VI) amino group wherein one or two hydrogen atoms in the amino group are optionally substituted by C1-4 alkyl, and the C1-4 alkyl group is optionally substituted by hydroxyl or C1-4 alkoxy;

- (11) $-\text{NR}^a\text{R}^b$;
- (12) $-\text{CO-OR}^c$;
- (13) $-\text{CO-NR}^d\text{R}^e$;

wherein, in groups (11) to (13), R^a , R^b , R^c , R^d , and R^e , which may be the same or different, represent a hydrogen atom or C1-4 alkyl, and the C1-4 alkyl group is optionally substituted by,

- (a) hydroxyl,
- (b) a halogen atom,
- (c) C1-4 alkoxy,

(d) a saturated or unsaturated three- to nine-membered carbocyclic or heterocyclic group optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom, or

(e) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, and

R^d and R^e together may combine with the carbon atoms to which they are attached represent a saturated three- to nine-membered heterocyclic group, and the heterocyclic group is optionally substituted by C1-4 alkyl, C1-4 alkoxy, or a halogen atom and may contain one

or more additional heteroatoms;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group; or

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group;

wherein (14) carbocyclic group, (15) heterocyclic group, and (16) bicyclic carbocyclic group or heterocyclic group are optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl, and

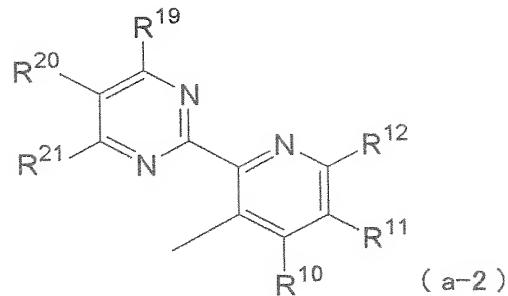
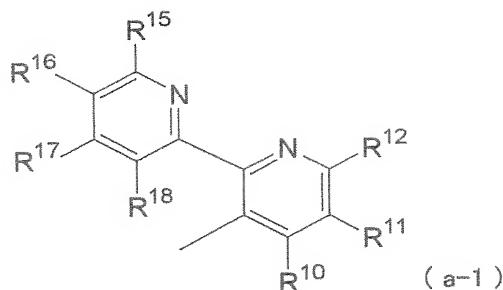
R¹⁰ and R¹¹, R¹¹ and R¹², R¹² and R¹³, and R¹³ and R¹⁴ together may combine with the carbon atoms to which they are attached represent a saturated or unsaturated five- or six-membered carbocyclic or heterocyclic group, and the carbocyclic group or heterocyclic group are optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl,

provided that, when E, G, J, L, and M represent a nitrogen atom, R¹⁰ to R¹⁴ which attach to the nitrogen atom are absent.

70. The compound according to claim 68 or 69, wherein

Q^1 represents a sulfur atom, and Q^2 represents a carbon atom.

71. The compound according to claim 68 or 69, wherein Q^1 represents a carbon atom, and Q^2 represents a sulfur atom.
72. The compound according to any one of claims 69 to 71, wherein, in the group of formula (a), any one of E, G, J, L, and M represents a nitrogen atom, and all the others represent a carbon atom.
73. The compound according to claim 72, wherein L represents a nitrogen atom, and E, G, J, and M represent a carbon atom.
74. The compound according to any one of claims 69 to 73, wherein
 - R^{10} represents a hydrogen atom, and
 - R^{11} and R^{12} are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.
75. The compound according to any one of claims 69 to 74, wherein R^{14} represents an optionally substituted unsaturated six-membered heterocyclic group.
76. The compound according to any one of claims 69 to 75, wherein T represents a group of formula (a-1) or (a-2):



wherein

R^{10} to R^{12} are as defined in claim 69,

R¹⁵ to R¹⁸ and R¹⁹ to R²¹, which may be the same or different, represent (0) a hydrogen atom, (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl.

77. The compound according to claim 76, wherein, in a group of formula (a-1) or (a-2), R^{15} to R^{18} and R^{19} to R^{21} are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.

78. The compound according to claim 76, wherein R^{10} represents a hydrogen atom, R^{11} and R^{12} are selected from the group consisting of a hydrogen atom and C1-4 alkyl, and, in the group of formula (a-1) or (a-2), R^{15} to R^{18} and R^{19} to R^{21} are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.

79. The compound according to claim 76, wherein R^{10} represents a hydrogen atom, R^{11} and R^{12} are selected from the group consisting of a hydrogen atom and C1-4 alkyl, and, in the group of

formula (a-1) or (a-2), all of R¹⁵ to R¹⁸ and R¹⁹ to R²¹ represent a hydrogen atom.

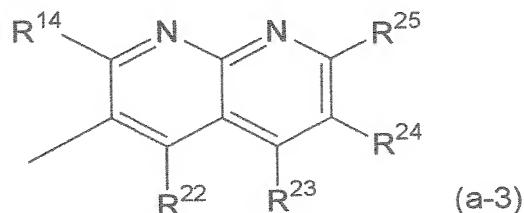
80. The compound according to any one of claims 76 to 79, wherein

R¹⁰ represents a hydrogen atom, and

R¹¹ and R¹² together combine with the carbon atoms to which they are attached represent a saturated or unsaturated five- or six-membered carbocyclic or heterocyclic group.

81. The compound according to claim 80, wherein R¹¹ and R¹² together combine with the carbon atoms to which they are attached represent a unsaturated six-membered carbocyclic or heterocyclic group.

82. The compound according to any one of claims 76 to 79, wherein T represents a group of formula (a-3):



wherein

R¹⁴ is as defined in claim 69,

R²² to R²⁵, which may be the same or different, represent (0) a hydrogen atom, (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl.

83. The compound according to claim 82, wherein, in the group of formula (a-3), R²² to R²⁵ are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.
84. The compound according to claim 82, wherein, in the group of formula (a-3), all of R²² to R²⁵ represent a hydrogen atom.
85. The compound according to any one of claims 82 to 84, wherein R¹⁴ represents
 - optionally substituted C1-4 alkyl,
 - an optionally substituted saturated or unsaturated five- or six-membered carbocyclic or heterocyclic group, or
 - an optionally substituted bicyclic saturated or unsaturated nine- or ten-membered carbocyclic or heterocyclic group.
86. The compound according to claim 85, wherein R¹⁴ represents unsubstituted C1-4 alkyl.
87. The compound according to claim 85, wherein R¹⁴ represents an optionally substituted unsaturated six-membered carbocyclic or heterocyclic group.
88. The compound according to any one of claims 68 to 87, wherein X represents a carbon atom and both R¹ and R² represent a hydrogen atom.
89. The compound according to any one of claims 68 to 88, wherein Q¹ represents a sulfur atom, Q² represents a carbon atom, and R⁹ represents a hydrogen atom.
90. The compound according to any one of claims 68 to

88, wherein Q¹ represents a carbon atom, Q² represents a sulfur atom, and R⁷ represents a hydrogen atom.

91. The compound according to any one of claims 68 to 90, wherein both R¹ and R² represent a hydrogen atom.

92. The compound according to any one of claims 68 to 91, wherein

R⁷ to R⁹, which may be the same or different, represent

(1) a hydrogen atom ;

(2) a halogen atom;

(3) hydroxyl;

(6) C1-6 alkyl;

(9) C1-6 alkoxy;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

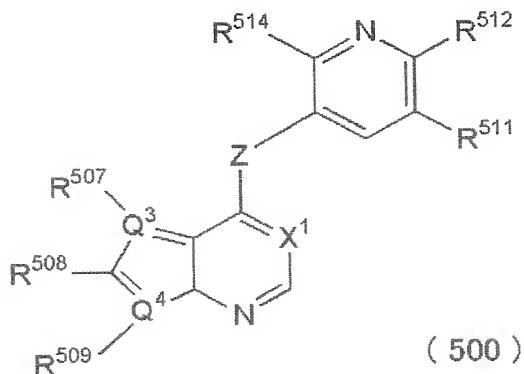
(15) a saturated or unsaturated three- to nine-membered heterocyclic group; or

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group, wherein these groups are optionally substituted as defined in claim 68.

93. The compound according to any one of claims 68 to 92, wherein Z represents -O-.

94. The compound according to any one of claims 68 to 93, wherein X represents a carbon atom.

95. The compound according to claim 68 or a pharmaceutically acceptable salt or solvate thereof, wherein formula (I) is represented by formula (500):



wherein

X^1 represents CH or N,

Z represents $-O-$, $-NH-$, $-S-$, or $-C(=O)-$,

any one of Q^3 and Q^4 represents a sulfur atom, and the other represents a carbon atom,

R^{507} to R^{509} , which may be the same or different, represent

(1) a hydrogen atom ;

(2) a halogen atom;

(3) hydroxyl;

(6) C1-6 alkyl;

(9) C1-6 alkoxy;

(12) $-CO-OR^c$;

(13) $-CO-NR^dR^e$;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group; or

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group wherein these groups are optionally substituted as defined in claim 68,

R^{511} and R^{512} , which may be the same or different, are selected from the group consisting of a hydrogen atom and C1-4 alkyl,

R^{514} represents

(14'') a saturated or unsaturated five- or six-membered carbocyclic group;

(15'') a saturated or unsaturated five- or six-membered heterocyclic group; or

(16'') a bicyclic saturated or unsaturated nine- or ten-membered carbocyclic or heterocyclic group;

wherein (14'') carbocyclic group, (15'') heterocyclic group, and (16'') bicyclic carbocyclic group or heterocyclic group are optionally substituted by (i) hydroxyl, (ii) a halogen atom, (iii) cyano group, (iv) nitro group, (v) amino group wherein one or two hydrogen atoms in the amino groups are optionally substituted by C1-4 alkyl, (vi) C1-4 alkyl, (vii) C2-4 alkenyl, (viii) C2-4 alkynyl, (ix) C1-4 alkoxy, (x) C1-4 alkylthio, (xi) -CO-OR^f, or (xii) -CO-NR^gR^h wherein R^f, R^g, and R^h, which may be the same or different, represent a hydrogen atom or C1-4 alkyl.

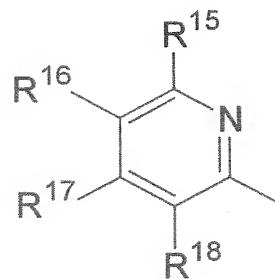
96. The compound according to claim 95, wherein Q³ represents a sulfur atom, and Q⁴ represents a carbon atom.

97. The compound according to claim 95, wherein Q³ represents a carbon atom, and Q⁴ represents a sulfur atom.

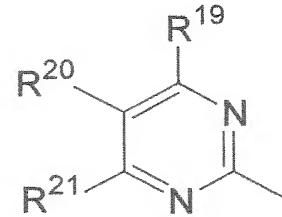
98. The compound according to any one of claims 95 to 97, wherein Z represents -O-.

99. The compound according to any one of claims 95 to 98, wherein both R⁵¹¹ and R⁵¹² represent methyl, or R⁵¹¹ represents a hydrogen atom while R⁵¹² represents ethyl.

100. The compound according to any one of claims 95 to 99, wherein R⁵¹⁴ represents a group of formula (a-4) or formula (a-5):



(a-4)



(a-5)

wherein

R^{15} to R^{18} and R^{19} to R^{21} , which may be the same or different, are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy.

101. The compound according to claim 100, wherein all of R^{15} to R^{18} and R^{19} to R^{21} represent a hydrogen atom.

102. The compound according to any one of claims 95 and 98 to 101, wherein

Q^3 represents a sulfur atom,

Q^4 represents a carbon atom,

R^{508} represents

a hydrogen atom,

C1-4 alkyl, or

a saturated or unsaturated six-membered carbocyclic or heterocyclic group,

wherein said carbocyclic or heterocyclic group is optionally substituted by (i) hydroxyl, (ii) a halogen atom, (v') amino group, (vi') C1-2 alkyl, or (ix') C1-2 alkoxy, and R^{509} represents a hydrogen atom.

103. The compound according to claim 102, wherein R^{508} represents a hydrogen atom or phenyl.

104. The compound according to any one of claims 95 and 98 to 101, wherein

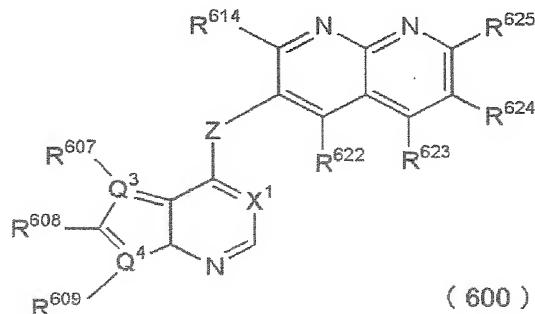
Q^3 represents a carbon atom,

Q^4 represents a sulfur atom, and

R^{507} and R^{508} are selected from the group consisting of a hydrogen atom and C1-4 alkyl.

105. The compound according to claim 104, wherein both R^{507} and R^{508} represent a hydrogen atom or both R^{507} and R^{508} represent methyl or R^{507} represent methyl while R^{508} represents a hydrogen atom.

106. The compound of formula (I) according to claim 69 or a pharmaceutically acceptable salt or solvate thereof, wherein formula (I) is represented by formula (600):



wherein

X^1 represents CH or N,

Z represents $-O-$, $-NH-$, $-S-$, or $-C(=O)-$,

any one of Q^3 and Q^4 represents a sulfur atom, and the other represents a carbon atom,

R^{607} to R^{609} , which may be the same or different, represent

(1) a hydrogen atom ;

(2) a halogen atom;

(3) hydroxyl;

(6) C1-6 alkyl;

(9) C1-6 alkoxy;

(12) $-CO-OR^c$;

(13) $-CO-NR^dR^e$;

(14) a saturated or unsaturated three- to nine-membered carbocyclic group;

(15) a saturated or unsaturated three- to nine-membered heterocyclic group; or

(16) a bicyclic saturated or unsaturated eight- to twelve-membered carbocyclic or heterocyclic group, wherein these groups are optionally substituted as defined in claim 68,

R^{622} to R^{625} , which may be the same or different, are selected from the group consisting of a hydrogen atom, a halogen atom, C1-4 alkyl, and C1-4 alkoxy, and

R^{614} represents

unsubstituted C1-4 alkyl,

an optionally substituted unsaturated six-membered carbocyclic or heterocyclic group, or

an optionally substituted bicyclic saturated or unsaturated nine- or ten-membered carbocyclic or heterocyclic group.

107. The compound according to claim 106, wherein Z represents -O-.

108. The compound according to claim 106 or 107, wherein all of R^{622} to R^{625} represent a hydrogen atom.

109. The compound according to any one of claims 106 to 108, wherein R^{614} represents phenyl.

110. The compound according to any one of claims 106 to 108, wherein R^{614} represents methyl or ethyl.

111. The compound according to any one of claims 106 to 110, wherein

Q^3 represents a sulfur atom,

Q^4 represents a carbon atom,

R^{608} represents

a hydrogen atom,

C1-4 alkyl, or

a saturated or unsaturated six-membered carbocyclic or heterocyclic group,

wherein said carbocyclic or heterocyclic group is optionally substituted by (i) hydroxyl, (ii) a halogen atom, (v') amino group, (vi') C1-2 alkyl, or (ix') C1-2 alkoxy, and R⁶⁰⁹ represents a hydrogen atom.

112. The compound according to claim 111, wherein R⁶⁰⁸ represents a hydrogen atom or phenyl.

113. The compound according to any one of claims 106 to 110, wherein

Q³ represents a carbon atom,

Q⁴ represents a sulfur atom, and

R⁶⁰⁷ and R⁶⁰⁸ are selected from the group consisting of a hydrogen atom and C1-4 alkyl.

114. The compound according to claim 113, wherein both R⁶⁰⁷ and R⁶⁰⁸ represent a hydrogen atom or both R⁶⁰⁷ and R⁶⁰⁸ represent methyl or R⁶⁰⁷ represents methyl while R⁶⁰⁸ represents a hydrogen atom.

115. The compound according to claim 68, which is selected from the group consisting of compounds 28, 29, 32 to 35, 71, 72, 75 to 78, and 180.

116. A pharmaceutical composition, comprising a compound according to any one of claims 1 to 115 or a pharmaceutically acceptable salt or solvate thereof as an active component.

117. The pharmaceutical composition according to claim 116, which can be used for the treatment or prevention of diseases for which TGF β inhibition is effective therapeutically or prophylactically.

118. The pharmaceutical composition according to claim 117, wherein the disease for which TGF β inhibition is effective therapeutically or prophylactically is a disease involving organ or tissue fibrosis.
119. The pharmaceutical composition according to claim 117, wherein the disease for which TGF β inhibition is effective therapeutically or prophylactically is chronic renal disease, acute renal disease, hepatic fibrosis, cirrhosis, pulmonary fibrosis, scleroderma, wound healing, arthritis, congestive cardiac disease, ulcer, ocular disorder, corneal problem, diabetic nephropathy, peritoneal sclerosis, arteriosclerosis, peritoneal adhesions, or subdermal adhesion.
120. The pharmaceutical composition according to claim 117, wherein the disease for which TGF β inhibition is effective therapeutically or prophylactically is a malignant tumor.
121. The pharmaceutical composition according to claim 116, wherein can be used for ex vivo expansion cells.
122. A TGF β inhibitor comprising a compound according to any one of claims 1 to 115 or a pharmaceutically acceptable salt or solvate thereof as an active component.
123. A method for treating or preventing a disease for which TGF β inhibition is effective therapeutically or prophylactically, said method comprising the step of administering a therapeutically or prophylactically effective amount of a compound according to any one of claims 1 to 115 or a pharmaceutically acceptable salt or solvate thereof to a patient requiring the treatment or prevention of the disease for which TGF β inhibition is effective

therapeutically or prophylactically.

124. The method according to claim 123, wherein the disease for which TGF β inhibition is effective therapeutically or prophylactically is a disease involving organ or tissue fibrosis.
125. The method according to claim 123, wherein the disease for which TGF β inhibition is effective therapeutically or prophylactically is chronic renal disease, acute renal disease, hepatic fibrosis, cirrhosis, pulmonary fibrosis, scleroderma, wound healing, arthritis, congestive cardiac disease, ulcer, ocular disorder, corneal problem, diabetic nephropathy, peritoneal sclerosis, arteriosclerosis, peritoneal adhesions, or subdermal adhesion.
126. The method according to claim 123, wherein the disease for which TGF β inhibition is effective therapeutically or prophylactically is a malignant tumor.
127. A method for amplifying cells, comprising the step of adding a compound according to any one of claims 1 to 115 or a pharmaceutically acceptable salt or solvate thereof, in an amount effective for promoting cell growth, to intended cells in vitro to amplify the cells.
128. The method according to claim 127, wherein said intended cells are hematopoietic stem cells.
129. A method for inhibiting the action of TGF β on cells, comprising the step of applying an effective amount of a compound according to any one of claims 1 to 115 to cells present in vitro or in vivo.
130. Use of a compound according to any one of claims 1 to 115, for the manufacture of a medicament used in the

treatment or prevention of diseases for which TGF β inhibition is effective therapeutically or prophylactically.

131. The use according to claim 130, wherein the disease for which TGF β inhibition is effective therapeutically or prophylactically is a disease involving organ or tissue fibrosis.
132. The use according to claim 130, wherein the disease for which TGF β inhibition is effective therapeutically or prophylactically is chronic renal disease, acute renal disease, hepatic fibrosis, cirrhosis, pulmonary fibrosis, scleroderma, wound healing, arthritis, congestive cardiac disease, ulcer, ocular disorder, corneal problem, diabetic nephropathy, peritoneal sclerosis, arteriosclerosis, peritoneal adhesions, or subdermal adhesion.
133. The use according to claim 130, wherein the disease for which TGF β inhibition is effective therapeutically or prophylactically is a malignant tumor.
134. The use of a compound according to any one of claims 1 to 115, for the manufacture of a TGF β inhibitor.
135. The use of a compound according to any one of claims 1 to 115, for the manufacture of a promotor forex vivo expansion cells.